

Natural Communities of Louisiana



Saline Prairie

Rarity Rank: S1/G1G2

Synonyms: Barrens, Salt Barrens, Slicks Ecological Systems: CES203.291 West

Gulf Coastal Plain Saline Glade

General Description:

Natural, mostly treeless typically only a few acres in size (range < 1 ac to 20 ac)

Arise on low flat terraces adjacent to small streams

Occur in a mosaic with the surrounding woodlands

Usually having variably dense herbaceous vegetation (thick to thin), with interspersed bare soil areas called "slicks"

Scattered pimple mounds may be present, where woody shrubs and small trees often become established

Plant community comprised of drought-tolerant forbs, grasses and grass-like plants, spring ephemeral wetland plants, and some halophytes

Soils with high levels of exchangeable sodium, high alkalinity, very poor movement of water and air, and resistance to both wetting and drying

Subsoil that acts as a dense clay pan restricting tree root penetration and water movement

Principal soils in UWGCP and EGCP are the Bonn and Lafe series; LWGCP on Brimstone soils

Fire likely played a minor role in maintaining these prairies, while the extreme soil conditions were the principal deterrent to woody plant invasion

Plant Community Associates

Characteristic species include:

Aristida spp. (three-awn grasses),

Bacopa monnieri (water hyssop, wet salines),

Carex glaucescens (sedge),

Chasmanthium latifolium (spikegrass),

Distichlis spicata (alkali grass, wet salines),

Fimbristylis castanea (wet salines),

Heliotropium curassivicum (heliotropes, wet salines), Iris brevicaulis (lamance iris),

Hibiscus moscheutos ssp. lasiocarpus (hibiscus),

Juncus spp. (rushes),

Lythrum lineare (loosestrife, wet salines),

Phyla nodiflora (frog-fruit),

Polygonum aviculare (knotweed),

Rhynchospora corniculata (beakrush),

Solidago sempervirens (seaside goldenrod, wet salines), Tradescantia occidentalis (spiderwort),

Spartina pectinata (prairie cordgrass, wet salines),

Aster subulatus,

Sporobolus vaginiflorus (poverty dropseed),

Croton michauxii,

Diodia teres (poorjoe),

Eleocharis spp. (spikerush),

Geocarpon minimum (earthfruit, rare),

Iva angustifolia (marsh elder),

Ludwigia spp. (primrose),

Panicum virgatum (switchgrass, wet salines),

Pluchea camphorata (stinkweed),

Proserpinaca pectinata (mermaid-weed),

Schizachyrium scoparium (little bluestem),

Tridens strictus (sandgrass)





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Common woody species include:

Ampelopsis arborea (peppervine),
Berchemia scandens (rattan vine),
Crataegus berberifolia (barberry hawthorn),
C. virdis (green hawthorn),
Morella cerifera (wax myrtle),
Quercus lyrata (overcup oak),
Q. similis (delta post oak),
Ulmus crassifolia (cedar elm)

Federally-listed plant & animal species:

Geocarpon minimum

Range:

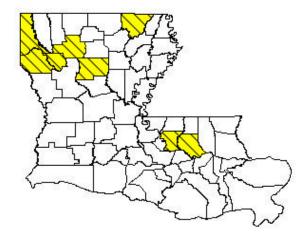
Primarily in the Upper and Lower West Gulf Coastal Plains, with historical occurrences known from East Baton Rouge, Livingston and Morehouse parishes and possibly adjacent areas.

Threats & Management Considerations:

Saline Prairies were not extensive in presettlement times. Total area was estimated at less than 2,000 acres with approximately 10 to 25 % remaining today. Saline prairies have mainly been lost to land use changes. Attempts at conversion to agriculture or homesteads represent the greatest initial losses, while construction of roads, pipelines

Baccharis hamilifolia (saltbush),
Cephalanthus occidentalis (buttonbush),
C. brachyacantha (blueberry hawthorn),
Fraxinus caroliniana (Carolina ash),
Pinus taeda (loblolly pine),
Q. nigra (water oak),
O. phellos (willow oak),

Threatened; G2; S1



and utilities, off-road vehicle use, physical damage from timber harvesting, contamination by chemicals (herbicides, fertilizers), and invasive and exotic species all threaten remaining saline prairies.

Use of appropriate management activities and developing a compatible management plan prevents destruction or degradation of this habitat type and promotes long-term maintenance of healthy saline prairies. Such management strategies should include:

- Preventing conversion of existing natural prairies to other land uses (ie food plots or pasture)
- No bedding, plowed fire lines or other soil disturbance that may alter natural water flow patterns
- Use of periodic prescribed fire (every 5 to 10 yrs)
- Prohibiting off-road vehicle use or restricting use to existing trails
- Preventing use of prairie openings as logging sets
- Monitoring for and removal of any invasive or exotic species by prescribed burning, spot herbicide treatments or mechanical means
- Do not apply fertilizer for pasture "improvement", and prevent off-target application when fertilizing large blocks of timber from aircraft



Saline prairie salt slick